

Application No. 09/901,566
Response dated March 9, 2005
Reply to Office Action of December 9, 2004

REMARKS

- (1) Applicants' representative appreciates the Examiner about the telephone discussion on March 8, 2005. The following remarks include applicants' separate record of the substance of that discussion.
- (2) Claims 1 and 3-8 are pending in this application, of which claims 5-8 have been added in this Response.
- (3) Claims 1, 3 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE Patent No. 3,841,203 to Obermayer et al. (Obermayer) in view of US Patent No. 5,263,444 to Prior et al. (Prior) and further in view of US Patent No. 5,934,686 to Ottenschläger.

Claims 5-7 have been added, whose basis is found at claims 1, 3 and 4, respectively.

The Examiner tries to modify the teachings of Obermayer in view of Prior et al. and Ottenschläger. Applicants traverse the rejection as follows.

First, there is no motivation or basis to modify Obermayer et al. in view of Ottenschläger. The teachings of Ottenschläger are directed to jointing a crankcase 11, an oil pan 1, and an equipment mount 13, as shown in Fig. 1. Further, the rubber elastic seal 5 is shown to be curved,

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but the rubber elastic seal 5 is not taught to be U-shaped, although the Office Action states so (Office Action, page 3, the last line). In addition, the curved rubber elastic seal 5 disclosed by Ottenschläger joints not the crankcase halves, but the oil pan 1 to the equipment mount 13. Although Ottenschläger teaches that the grooves 6 and the offset recesses 7 may be provided in the crankcase 11 (col.5, lines 29-31), there is no teaching that the grooves 6 are made to form the crankcase. Thus, the teachings of Ottenschläger are completely different from Obermayer et al. who teach jointing the two case halves to form the crankcase.

In addition, as admitted by the Examiner, Obermayer et al. fail to disclose that the enlarged recess is located in only one of the crankcase halves, and the enlarged recesses of Obermayer et al. being formed on both of the case halves. Page 3, lines 8-12 of the Office Action. Prior et al. seem to be cited for the enlarged recess or the gasket. The Examiner merely cites Ottenschläger, stating that only one surface is taught to have a groove (7) with an enlarged recess (8). However, the Examiner has not shown any basis to apply the teachings of Ottenschläger to joint different members from the crank case, to Obermayer et al. There is no motivation or basis to modify Obermayer et al. in view of Ottenschläger to provide the groove on only one of the case halves, because Ottenschläger does not teach jointing two case halves, U-shaped seal member, nor the merit to form the groove on only one of the joint members. Also, Obermayer et al. cannot be modified by the teachings of Ottenschläger, at least because the symmetrical sealing piece 11 or sealing shoulder 16 of Obermayer et al. would not be compatible with the groove formed on only

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one of the case halves.

Second, Ottenschläger is a teaching away from Obermayer et al. The teachings of Ottenschläger are limited to be applicable for sealing the corner area of a wall element having a right angle or at least with some angles (col. 2, line 66 to col.3, line 4). In addition, the teachings of Ottenschläger are limited in that the grooves in the two sealing rims are not arranged in a single common plane, but the two grooves in the two sealing rims are offset and askew relative to one another, so that they do not intersect, are not parallel, and do not lie in the same plane, at the area of the edge intersection of the planes of the two sealing rims (col. 2, lines 14-20). The teachings of Ottenschläger are inconsistent with the teachings of Obermayer et al., because Obermayer et al. teaches jointing plane surfaces of two case halves of a crank case. There is no corner in Obermayer et al., to which Ottenschläger can be applied. Since the prior art reference must be considered in its entirety, including disclosure of teaching away (MPEP 2141.02), the Examiner cannot rely on Ottenschläger.

Claim 1 of the present invention recites that joint surfaces of the first and second case halves are coupled to each other in a plane extending perpendicular to the lower end face of the cylinder block, and that one of the joint surfaces includes a U-shaped seal groove extending along a peripheral edge of the crank chamber. Thus, it is clear that the U-shaped seal groove of claim 1 is formed in a plane of the joint surface. Even if the body of the U-shaped seal member of the

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present invention corresponds to one groove and the enlarged recess of the present invention corresponds to another groove, the invention of claim 1 is completely different from the teaching of Ottenschläger because the body of the U-shaped seal member of the present invention intersects with the enlarged recess.

Regarding newly added claim 5, the U-shaped seal groove is provided on the first joint surface, which is terminated at the enlarged recess of the present invention. It is clear that the U-shaped seal groove of claim 5 is provided on only one plane. Even if the body of the U-shaped seal member of the present invention corresponds to one groove and the enlarged recess of the present invention corresponds to another groove, the invention of claim 5 is completely different from the teaching of Ottenschläger because the body of the U-shaped seal member of the present invention intersects with the enlarged recess.

Thus, the invention of claims 1 and 5 is not obvious over the references. Reconsideration of the rejection is respectfully requested.

(4) Regarding added claim 8, the basis is found at Fig. 6. By the arrangement of claim 8, the U-shaped seal member is given resiliency toward the outside wall of the groove, which makes the U-shaped seal member biased in the groove, resulting in securing the sealing of the crankcase.

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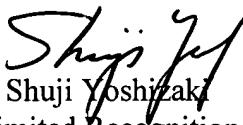
(5) In view of the above, claims 1 and 3-8 are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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